

REMARKS

At the time of the Office Action dated September 8, 2004, claims 1-3 were pending in this application. Of those claims, claim 1 has been rejected. Applicant acknowledges, with appreciation, the Examiner's indication that claims 2 and 3 contain allowable subject matter.

CLAIM 1 IS REJECTED UNDER 35 U.S.C. § 103 FOR OBVIOUSNESS BASED UPON UEHARA ET AL., U.S. PATENT NO. 5,698,902 (HEREINAFTER UEHARA), IN VIEW OF TORII ET AL., U.S. PATENT NO. 6,667,199 (HEREINAFTER TORII)

In the statement of the rejection, the Examiner referred specifically to Fig. 6 of Uehara, and asserted that this figure discloses the claimed invention with the exception of the vertical configuration of the contact structure. The Examiner then asserted that Torii discloses this configuration and one having ordinary skill in the art would have been motivated to modify Uehara in view of Tara to arrive at the claimed invention. This rejection is respectfully traversed.

Applicant respectfully submits that one having ordinary skill in the art would not have been motivated to modify the applied prior art in the manner suggested by the Examiner. Furthermore, even if the applied prior art were to be combined as proposed in the Office Action, the claimed invention would not result.

With regard to the requisite motivation to modify Uehara in view of Tara, the Examiner stated on page 3 of the Office Action the following:

It would have been obvious to one of having ordinary skill in the art at the time the invention was made to include the required vertical type contact structure in Uehara et al. as taught by Torii et al. in Uehara et al. in order to have a semiconductor memory device with ease of manufacture.

Although the Examiner asserts that the benefit of "ease of manufacture" would result from modifying Uehara in view of Torii, the Examiner has failed to provide an explanation as to exactly how this "ease of manufacture" would occur and how this benefit relates to the claimed limitations disclosed by Torii. The "ease of manufacture" motivation is a generalization, that does not establish the requisite motivation to modify a specific reference in a specific manner to arrive at a specifically claimed invention.¹ Rather, the Examiner is required to make "clear and particular" factual findings as to any specific understanding or specific technological principle which would have realistically impelled one having ordinary skill in the art to modify the device disclosed by Uehara in view of Torii to arrive at the claimed invention.² Therefore, Applicant respectfully submits that a sufficient motivation to modify Uehara in view of Torii has not been established.

Applicant also submits that the Examiner has mischaracterized the limitations that Uehara fails to teach. The Examiner states only that "Uehara et al. fail to disclose the required vertical configuration of the contact structure." However, not only does Uehara fail to teach that the dummy portion is formed at a position on an extension of a longitudinal direction of a straight portion of the gate electrode, Uehara also fails to teach the features recited in lines 16-27 of claim 1.

¹ In re Deuel, 51 F.3d 1552, 34 USPQ2d 1210 (Fed. Cir. 1995).

² Ruiz v. A.B. Chance Co., 234 F.3d 654, 57 USPQ2d 1161 (Fed. Cir. 2000); Ecolochem Inc. v. Southern California Edison, Co., 222 F.2d 973, 56 USPQ2d 1065 (Fed. Cir. 2000); In re Kotzaab, 217 F.3d 1365, 55 USPQ 1313 (Fed. Cir. 2000); In re Dembiczak, 175 F.2d 994, 50 USPQ2d 1614 (Fed. Cir. 1999).

The line spanning pages two and three of the Office Action describes the limitations in Torii being relied upon for the rejection. However, it is unclear from the Examiner's description of Torii, or from Torii itself, where these claimed limitations missing from Uehara can be found in Torii.

Notwithstanding that Torii fails to teach or suggest the limitations missing from Uehara, one having ordinary skill in the art would not have been motivated to modify Uehara in view of Torii to arrive at the claimed invention. Claim 1 recites that a sidewall insulating film fills a gap between a gate electrode and a dummy electrode. In the statement of the rejection, the Examiner identified feature 50b in Uehara as the dummy electrode, feature 50a as the gate electrode, and features 21a, 21b as the source and drain regions. If Uehara were modified to have a sidewall insulating film (i.e., feature 20a, 20b in Uehara) that fills the gap between the gate electrode 50a and the dummy electrode 50b, then electrodes 31 would not be able to reach the source and drain regions 21, 21b, which would render the semiconductor device inoperable. Therefore, one having ordinary skill in the art would not have arrived at the claimed invention based upon the combination of Uehara and Torii. Thus, Applicant respectfully solicits withdrawal of the imposed rejection of claim 1 under 35 U.S.C. § 103 for obviousness based upon Uehara in view of Torii.

Applicant has made every effort to present claims which distinguish over the prior art, and it is believed that all claims are in condition for allowance. However, Applicant invites the Examiner to call the undersigned if it is believed that a telephonic interview would expedite the prosecution of the application to an allowance. Accordingly, and in view of the foregoing

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remarks, Applicant hereby respectfully requests reconsideration and prompt allowance of the pending claims.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417, and please credit any excess fees to such deposit account.

Respectfully submitted,

MCDERMOTT WILL & EMERY LLP



Scott D. Paul
Registration No. 42,984

600 13th Street, N.W.
Washington, DC 20005-3096
Phone: 202.756.8000 SDP/GZR:kap
Facsimile: 202.756.8087
Date: December 7, 2004

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